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Specialty Crops Production and Marketing - 1997

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Ohio Agricultural Research and Development Center

and

Ohio State University Extension
Alternative Ag. Enterprise Center



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Petoseed

Stokes

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Research in specialty crops or unusual vegetables has been conducted at Ohio State University since 1994. Over 40 crops have been tested for their suitability to Ohio's growing conditions and in many cases the marketability of these crops. As new cultivars are released and heirlooms resurface, the list of potential niche crops for Ohio continues to grow.

In 1997, four specialty crops were tested under central Ohio growing conditions and plots were established at the OSU Waterman Farm Complex in Columbus. The crops tested were:

| <u>Crop</u> | <u>Cultivar</u> | <u>Seed Source</u> |
|-------------|--------------------|------------------------|
| Swiss Chard | 'Joseph's Coat' | Shepard's Garden Seeds |
| Tomato | 'Tigerette Cherry' | Stokes |
| Pumpkin | 'Lumina' | Stokes |
| Lettuce Mix | 'Bon Vivant Blend' | Petoseed |

We were very fortunate this year to have the excellent cooperation of Ben Roth, *Roth Produce Company*, Columbus, to market some of these cultivars for us. Quality standards and packaging requirements from Roth Produce were followed and are listed under those specific crops. Marketing of these crops has allowed us to gain feedback on the demand for these crops, quality of these specific cultivars, and wholesale prices for these items in 1997.

Tomatoes were seeded (April 3) and transplants grown in the Dept of Horticulture and Crop Science greenhouses in Columbus. All other crops were direct seeded. Tomatoes, swiss chard and pumpkins were planted in 4 replications. Lettuce was planted in one replication for observation only.

STATEMENT ON PRICES

The wholesale prices listed in this report are the average prices for the season since more than one delivery was made.

SWISS CHARD (*Beta vulgaris* var. *cicla*)

'Joseph's Coat' (Shepard's Seeds): This rainbow colored swiss chard contained a mix of chard with bright green leaves and stalks (petioles) in several colors; orange, pink, yellow, red, white and green that matures in approximately 55 days.

Swiss chard is a member of the beet family that is grown for the edible leaves and stalks. The leaf blades are prepared like spinach, and the stalks may be cooked in the same manner as asparagus. Chard may be transplanted or direct seeded into the garden. Although a cool season crop, this cultivar was harvested throughout the summer without any loss in quality.

Our plots were direct seeded on May 28, 1997, into raised beds spaced 5 feet apart. Seeds were placed 6 inches apart within the row. No disease or insect problems were noted throughout the growing season. Unmarketable leaves were due to hail damage from two storms in July and August. Leaves were harvested by hand snapping them at ground level. Plots were harvested 7 times from July 29 through September 16. Marketable yields totaled 9.5 T/A with culls weighing 3 T/A. All culled

product was due to hail damage to the leaves.

Marketing: Marketable leaves were bunched in groups of 24. Six bunches were packaged per crate. Wholesale prices received were \$3.75 per crate (6 bunches).

Once germination occurred on this cultivar, we noticed the seed did not contain an equal mix of colors. The packets we received contained all colors mentioned but was predominately red, green and white. In mid-July, Shepard's Seeds sent out letters to customers who had purchased this seed, along with a refund, explaining that the seed may not have been properly mixed before packaging. The company stated that they could not guarantee a source for this mix for the 1998 growing season.

For those interested in trying a rainbow cultivar, an All-America Selection Winner for 1997 'Bright Lights', which will be offered by Johnny's Selected Seeds in 1998, may be a good alternative. This variety was grown as an ornamental in the Ohio State University Chadwick Arboretum (Columbus) during the summer of 1997 and contained many vivid colors (yellow, orange, pink, red) as well as a good blend of colors.

TOMATO (*Lycopersicon esculentum*)

'Tigerette Cherry' (Stokes Seeds): Specialty tomatoes continue to be a popular item with restaurants and chefs who are looking for unique produce. In previous years, these items were popular with the wholesale and retail markets where we tested these varieties. This year we tested a unique cultivar from Stokes Seeds. 'Tigerette Cherry' is an unusual red and yellow striped oval to round fruit on unique small, compact plants that have yellowish-green ornamental foliage. Average fruit size is approximately 2 3/4 inch diameter and approximately .07 lbs. Although the outer skin is striped the fruit interior is solid red with a good tomato flavor.

Transplants were seeded in the OSU greenhouse on April 3 and transplanted to the field on May 28 into raised beds with black plastic mulch. Beds were spaced 5 feet apart with plants spaced 3 feet apart within single rows (2,904 plants/A). Plant population (and yield) could be increased by closer spacing of these small, compact plants. No major insect problems were noted throughout the season. Septoria leaf spot (confirmed by a plant pathologist at Ohio State University) caused early "burning" of the foliage throughout the plots; however, no damage was visible on the fruit itself.

The unique plants are very compact; making harvest difficult. Plants had to be "turned over" to harvest fruit from the interior of the plants. Often, branches were broken off during harvest. Fruit was harvested five times during the season from August 5 to September 9. Marketable yields were 8 T/A with culled fruit weighing 2 T/A. Fruit was culled due to cracking and ground rot.

Marketing: tomatoes were graded and all marketable fruit was packed in peck baskets of 10 lbs. each. Wholesale prices were \$4.50/10 lbs. These unique tomatoes continued to be a popular item on the wholesale market.

LETTUCE (*Lactuca sativa*)

'Bon Vivant Blend' (Petoseed) : This unique and colorful gourmet salad mix contains a blend of green

and red leaf lettuce and oakleaf cultivars. This mix provides a mild flavored gourmet salad/mesclun mix with a variety of leaf colors, shapes and textures.

This cultivar was seeded in triple rows (approximately 6 inches apart) on raised beds on May 28. Seeds were scattered within the rows. Germination was excellent and this variety performed very well under Ohio's spring conditions. Due to limited seed amounts, this was grown for observation purposes only and was not marketed. This is a very promising variety for growers looking for a unique, mild flavored salad mix for greenhouse or field production.

PUMPKINS (*Cucurbita pepo*)

'Lumina' (Stokes Seeds) : This unusual pumpkin variety is white-fleshed and varies in shape from round to oval. 'Lumina' matures in approximately 85 days. This cultivar seems to be resistant to powdery mildew. The exterior flesh is smooth and is an excellent variety for carving. The unique white color sets it apart from and compliments the popular orange varieties.

Plots were seeded in Columbus on May 28 in rows 5 feet apart and seeds spaced 4' apart. Due to excessive rain after seeding, heavy insect and disease pressure and varmint damage, plots in Columbus were not harvested.

Plots were also established at a growers farm in southern Ohio (Hillsboro) on June 18. Rows were spaced 90 inches apart with seeds spaced 3 feet apart. No insect or disease pressure was present in these plots. Average fruit circumference measurements were 27.5 inches and average fruit weight was 9 pounds. Each plant averaged 2 fruits/plant. 'Lumina' needs to be harvested slightly immature, in that mature pumpkins develop a bluish/gray tint.

Our grower reports that this unusual variety sold well at \$2.50 each at his roadside market and added variety to his pumpkin selection. Customers stated that the color was unusual and most would purchase this variety along with their usual orange pumpkins. This unusual variety is definitely worth growing/selling for variety and uniqueness. Display next to orange varieties as well as fall gourds and ornamental/indian corn.

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